**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (currently amended) A self calibrating network comprising:

a first node to transmit a test signal; and

a second node to receive said test signal and to adjust ~~determine a calibration value for said~~ a second node transceiver to optimize a transfer of data between said first node and said second node, said adjustment of said second node transceiver being based on ~~calibration value being determined from~~ at least one of available criteria comprising a noise measurement value, a propagation delay value and a bit rate error value.

2. (previously presented) The self calibrating network according to claim 1, wherein:

said second node stores said calibration value in a calibration memory.

3. (previously presented) The self calibrating network according to claim 1, wherein:

said test signal contains a node identification associated with said first node.

4. (previously presented) The self calibrating network according to claim 1, wherein:

said second node repeatedly accepts copies of said test signal from said first node until the transfer of data from said first node to said second node is optimized.

5. (previously presented) The self calibrating network according to claim 2, wherein:

said calibration memory stores said calibration value associated with a node identification.

6. (previously presented) The self calibrating network according to claim 1, wherein:

said first node repeatedly transmits a test signal until said second node acknowledges an optimal calibration value has been determined.

7. (currently amended) A [[The]] self calibrating network ~~according to claim~~ [[1]], comprising ~~wherein~~:

a first node to transmit a test signal; and

a second node to receive said test signal and to adjust a second node transceiver to optimize a transfer of data between said first node and said second node, said adjustment of said second node transceiver being based on at least one of available criteria comprising a noise measurement value, a propagation delay value and a bit rate error value;

wherein said one of said first node or said second node issues a network lock command on the network, ceasing nodes other than said first node or said second node from communicating on the network.

8. (previously presented) The self calibrating network according to claim 7, wherein:

said first node or said second node issues an unlock command on the network, giving permission to all nodes on the network to again begin communication.

9. (currently amended) A method for self calibrating a network comprising:

transmitting a test signal from a first node; ~~and~~

receiving said test signal by a second node; and

<u>adjusting</u> ~~determining a calibration value for said~~ <u>a</u> second node <u>transceiver</u> to optimize a transfer of data between said first node and said second node, said <u>adjustment of said second node transceiver being based on</u> ~~calibration value being determined from~~ at least one of available criteria comprising a noise measurement value, a propagation delay value and a bit rate error value.

10. (previously presented) The method for self calibrating a network according to claim 9, further comprising:

storing said calibration value in a calibration memory.

11. (previously presented) The method for self calibrating a network according to claim 9, further comprising:

associating a node identification associated with said first node in said test signal.

12. (previously presented) The method for self calibrating a network according to claim 9, further comprising:

repeatedly accepting copies of said test signal by said second node from said first node until the transfer of data from said first node to said second node is optimized.

13. (previously presented) The method for self calibrating a network according to claim 10, further comprising:

storing in said calibration memory said calibration value associated with a node identification.

14. (previously presented) The method for self calibrating a network according to claim 9, further comprising:

repeatedly transmitting from said first node a test signal until said second node acknowledges an optimal calibration value has been determined.

15. (currently amended) A [[The]] method for self calibrating a network according to claim [[9]], further comprising:

transmitting a test signal from a first node;

receiving said test signal by a second node;

adjusting a second node transceiver to optimize a transfer of data between said first node and said second node, said adjustment of said second node transceiver being based on at least one of available criteria comprising a noise measurement value, a propagation delay value and a bit rate error value;

issuing from said one of said first node or said second node a network lock command on the network; and

ceasing nodes other than said first node or said second node from communicating on the network.

16. (previously presented) The method for self calibrating a network according to claim 15, further comprising:

issuing from said first node or said second node an unlock command on the network, giving permission to all nodes on the network to again begin communication.

17. (currently amended) A means for self calibrating a network comprising:

transmitter means for transmitting a test signal from a first node; ~~and~~

receiver means for receiving said test signal from said first node; and

adjust means for adjusting ~~determining a calibration value for said~~ a second node transceiver to optimize a transfer of data between said first node and said second node, said adjustment of said second node transceiver being based on ~~calibration value being determined from~~ at least one of available criteria comprising a noise measurement value, a propagation delay value and a bit rate error value.

18. (previously presented) The means for self calibrating a network according to claim 17, further comprising:

storage means for storing said calibration value in a calibration memory.

19. (previously presented) The means for self calibrating a network according to claim 17, further comprising:

associate means for associating a node identification with said first node in said test signal.

20. (previously presented) The means for self calibrating a network according to claim 17, further comprising:

repeated acceptor means for repeatedly accepting copies of said test signal by said second node from said first node until transfer of data from said first node to said second node is optimized.

21. (previously presented) The means for self calibrating a network according to claim 17, further comprising:

storage means in said calibration memory, said calibration value being associated with a node identification.

22. (previously presented) The means for self calibrating a network according to claim 17, further comprising:

repeated transmitter means repeatedly transmitting from said first node a test signal until said second node acknowledges an optimal calibration value has been determined.

23. (currently amended) A [[The]] means for self calibrating a network according to claim [[17]], further comprising:

transmitter means for transmitting a test signal from a first node;

receiver means for receiving said test signal from said first node;

adjust means for adjusting a second node transceiver to optimize a transfer of data between said first node and said second node, said adjustment of said second node transceiver being based on at least one of available criteria comprising a noise measurement value, a propagation delay value and a bit rate error value; and

issue means for issuing from said one of said first node or said second node a network lock command on the network, ceasing nodes other than said first node or said second node from communicating on the network.

24. (previously presented) The means for self calibrating a network according to claim 23, further comprising:

issue means for issuing from said first node or said second node an unlock command on the network, giving permission to all nodes on the network to again begin communication.